



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/689,005  | 10/12/2000  | Shoei Kobayashi      | 202702US6           | 7667             |
| 22850   | 7590        | 06/07/2004           | EXAMINER            |                  |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.<br>1940 DUKE STREET<br>ALEXANDRIA, VA 22314 |             |                      | CHU, KIM KWOK       |                  |
|   |             | ART UNIT             |                     | PAPER NUMBER     |
|   |             | 2653                 |                     | 14               |
| DATE MAILED: 06/07/2004   |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 09/689,005             | KOBAYASHI ET AL.    |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Kim-Kwok CHU           | 2653                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on Amendment filed on 3/24/04 (paper 13).
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1 and 6-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1 and 6-10 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

***Response to Remarks***

1. Applicant's Remarks (paper 13) filed on March 24, 2004 have been fully considered.

(a) in the Remarks, on page 7, lines 6-8, Applicant states that all his claims require "the system controller must produce a PLL circuit with a wobble enable signal to control this PLL circuit to provide an unchanging synch signal ..." Accordingly, the prior art of Inokuchi's abnormal jump detection signal 22 can be considered as Applicant's wobble enable signal because the claimed wobble enable signal is not defined so that it is distinguishable from the abnormal jump detection signal 22; and

(b) in the Remarks, on page 7, lines 16 and 17, Applicant does not agree that the prior art of Inokuchi's abnormal jump detector circuitry 22 is a system controller means. Accordingly, the output of the detector circuitry 22 goes to other controls means such as 6, 7, 8, 9 and 18 etc. Since the controls means such as 6-9 and 18 are system control means, the abnormal jump detector circuitry 22 is a system control means.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless -  
(e) the invention was described in a patent granted on  
an application for patent by another filed in the  
United States before the invention thereof by the  
applicant for patent, or on an international  
application by another who has fulfilled the  
requirements of paragraphs (1), (2), and (4) of  
section 371(c) of this title before the invention  
thereof by the applicant for patent.*

3. Claims 1, 7, 9 and 10 are rejected under 35 U.S.C. § 102(e) as being anticipated by Inokuchi et al. (U.S. Patent 6,172,952).

Inokuchi teaches a recording/reproducing apparatus for recording and reproducing data on and from an optical disk having all the elements and means as recited in claims 1 and 7. For example, Inokuchi teaches the following:

- (a) as in claim 1, the optical disk that has an address data area A1 having embossed pits and a recording/reproducing area having a wobbling spiral groove (Figs. 2A and 2B);
- (b) as in claim 1, head means 3 for reading address data from the address data area and writing and reading a signal in and from the recording/reproducing area (Fig. 1);
- (c) as in claim 1, system controller means 4, 8 for controlling components of the recording/reproducing apparatus including servo circuit means (Fig. 1; controlling means such as

4 and 8 generates servo data and controls recording/reproducing operations) ;

(d) as in claim 1, the system controller means 10 controlling the servo circuit means for moving the head means to a desired address position on the optical disk (Fig. 1 system controller includes a focusing/tracking control means 10) ;

(e) as in claim 1, wobble-signal processing means 4 for extracting a wobble signal from the signal the head means obtains from the wobbling spiral groove (Figs. 2A and 2B; column 10, lines 45-50) ;

(f) as in claim 1, providing the wobble signal to a PLL circuit means 17-21 for producing a sync signal (Fig. 1, column 12, lines 19-32) ;

(g) as in claim 1, the system controller means 22 produces a wobble enable signal when the system controller means controls switching of the recording/reproducing apparatus between at least one of recording and reproducing operations (Fig. 1; abnormal jump detection means always produces a signal especially during the switching of recording/reproducing operations) ;

(h) as in claim 1, the system controller means 22 produces a wobble enable signal when the system controller means controls the servo circuit means to move the head means to a desired address position on the optical disc (Fig. 1; abnormal jump

detection means 22 always produces a detected signal during servo operations) ;

(i) as in claim 1, when the wobble-signal processing means 4 otherwise does not provide a wobble extracted from the signal the head means obtains from the wobbling spiral groove and provides the wobble enable signal to the PLL circuit means 17-21 (Fig. 1; charge pump 18 receives the abnormal jump detection signal) ;

(j) as in claim 1, the PLL circuit means 17-21 further providing an unchanging sync signal in response to receiving the wobble enable signal 22 (Fig. 1; the sync signal does not change when the charge pump 18 receives the abnormal jump detection signal; column 16, lines 5-9; column 16, lines 32-44); and

(k) as in claim 7, the system controller means 22 provide the wobble enable signal an input gate 18 of the PLL circuit means 17-21 also receiving the wobble signal from the wobble signal processing means 4 (Fig. 1; column 17, lines 51-57).

4. Claims 9 and 10 have limitations similar to those treated in the above rejection, and are met by the references as discussed above.

5. Claims 6 and 8 are rejected under 35 U.S.C. § 102(e) as being anticipated by Inokuchi et al. (U.S. Patent 6,172,952).

Inokuchi teaches a method of recording/reproducing data on and from an optical disk having all the steps as recited in claims 6 and 8. For example, Inokuchi teaches the following:

- (a) as in claim 6, an optical disk that has an address data area having embossed pits and a recording/reproducing area having a wobbling spiral groove (Figs 2A and 2B);
- (b) as in claim 6, reading address data from the address data area and writing and reading a signal from the recording/reproducing area using a head 3 (Fig. 1);
- (c) as in claim 6, extracting a wobble signal from a signal obtained from the wobbling spiral groove when the head and wobbling spiral groove are in proximity (Fig. 1; column 10, lines 45-50);
- (d) as in claim 6, providing the wobble signal to a PLL circuit 17-21 to produce a sync signal from the wobble signal (Fig. 1; column 12, lines 19-32);
- (e) as in claim 6, using a system controller 10 to control components of the recording/reproducing apparatus to provide operations resulting in the loss of the extracted wobble signal including the operation of switching between recording and reproducing functions and operations in which the head is not in proximity with the wobbling spiral groove (Fig. 1, column 8;

lines 18-21; an operation such as recording/reproducing discontinue is provided by an abnormal jump as a result in the loss of the extracted wobble signal including the operation of switching between recording and reproducing function);

(f) as in claim 6, providing a wobble enable signal from the system controller 22 to the PLL circuit 17-21 at least when the system controller is controlling components of the recording/reproducing apparatus to provide the operations resulting in the loss of the extracted wobble signal (Fig. 1; abnormal jump detection sector 22 always produces a signal during servo operations; column 8; lines 18-21; an operation such as recording/reproducing discontinue is provided by an abnormal jump as a result in the loss of the extracted wobble signal including the operation of switching between recording and reproducing function);

(g) as in claim 6, the wobble enable signal from the system controller 22 causing the PLL circuit 17-21 to hold the sync signal unchanged as the wobble enable signal is provided by the system controller (Fig. 1; the sync signal does not change when the charge pump 18 receives the abnormal jump detection signal; column 16, lines 5-9; column 16, lines 32-44); and

(h) as in claim 8, the wobble enable signal from the system controller 22 and the wobble signal are provided to respective inputs of a gate input 18 of the PLL circuit 17-21 (Fig. 1;

column 17, lines 51-57).

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action

7. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C.  
20231 Or faxed to:

(703) 872-9306 (for formal communications intended for entry. Or:

(703) 746-6909, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

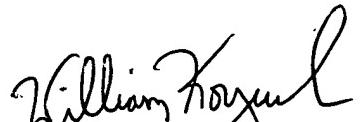
Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim CHU whose telephone number is (703) 305-3032 between 9:30 am to 6:00 pm, Monday to Friday.

kc 6/1/04

Kim-Kwok CHU  
Examiner AU2653  
June 1, 2004

(703) 305-3032

  
WILLIAM KORZUCH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600